



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,024	07/30/2007	Xavier Arques	11345/122001	1377

22511 7590 10/19/2009
OSHA LIANG L.L.P.
TWO HOUSTON CENTER
909 FANNIN, SUITE 3500
HOUSTON, TX 77010

EXAMINER

OKEKE, ONYEDIKA C

ART UNIT	PAPER NUMBER
----------	--------------

2425

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/19/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@oshaliang.com
buta@oshaliang.com

Office Action Summary	Application No.	Applicant(s)	
	10/582,024	ARQUES, XAVIER	
	Examiner	Art Unit	
	Dika C. Okeke	2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 15 June 2009 has been entered. Claims 1-5, 7-17, 21-22, and 25-31 have been amended, With claims 1 and 13 being independent.

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-4, 8-10, 12-16, 20-22 and 24-31 are rejected under 35 U.S.C. 102(a) as being anticipated by Wasserman et al (US Pub. No. 2003/0208761; referred hereinafter as 'Wasserman').

Regarding claim 1, Wasserman teaches a method of recovering information in an interactive digital television system, in which information from a transmission centre is transported in a data stream to at least one terminal device in which one or more applications , the method comprising:

loading and storing the information in a cache memory provided in the terminal device, wherein the information is service information corresponding to the one or more applications (para. [0003], [0020]-[0022], [0039]-[0040]; *for the carousel file system 124 sends EPG data 126 to the STB/client 130 for use by the EPG program/application 520*); receiving from the at least one application a request to recover the information (para. [0040]); recovering of the information from an information carrier containing the information and provision of the duly recovered information to the at least one application sending the request (para. [0041]; *for when a search match is found, the EPG data is sent from the carousel file system 124 and stored in the client*); and searching for the information, according to at least one predefined selection criterion used to define a type of search performed, in at least one of the information carriers formed by the data stream, and the cache memory (see para. [0041], [0045]-[0053]).

Regarding claim 2, Wasserman teaches the method as claimed in claim 1, wherein the search step, carried out in the at least one terminal device of searching, comprises searching for the information in the cache memory (see [0041], *for the matching EPG data is stored locally in a RAM 510, and can further be full-text searched by the search engine 522*).

Regarding claim 3, Wasserman teaches the method as claimed in claim 1, wherein the search step, carried out in the at least one terminal device of searching, comprises searching for the information comprises searching for the information in the

data stream (see [0041]; *for the client derives a search query similar to the manner the carousel file server derives index values; comparing and searching the hashed query with the harsh index values 304 stored in the carousel system*).

Regarding claim 4, Wasserman teaches the method as claimed in claim 1, wherein the search step, carried out in the at least one terminal device of searching, comprises searching for the information in the cache memory after an unsuccessful search in the data stream (see [0053]-[0056]; *for the search engine based in the client further “full-text” searches the stored EPG data segments because the associated EPG data from the carousel may not contain content satisfying the query*).

Regarding claim 8, Wasserman teaches the method as claimed in claim 1, further comprising defining at least one [of] the selection criterion by the application ([0040]; *for the application – EPG program 520 – resident in the client, includes a search engine to search the EPG data. It defines the hashing functions*).

Regarding claim 9, Wasserman teaches the method as claimed in claim 1, further comprising defining at least one [of] the selection criterion by an intermediate software layer and/or a hardware layer of the terminal device ([0038], [0039] and [0045]; *note the discussions on claim 8 above*).

Regarding claim 10, **note the discussions in claims 8 and 9 above**. Wasserman teaches the method as claimed in claim 1, further comprising defining at least one [of] the selection criterion by the interactive digital television system (see [0020], [0041]; fig. 1, television entertainment system 100).

Regarding claim 12, Wasserman teaches the method as claimed in claim 1, further comprising formatting the recovered information before supplying the latter to the at least one application sending the request (see [0018] and [0019]; format).

Claims 13-15 are analyzed as devices of claims 1-3 respectively.

Claim 16 is analyzed as a device of claim 4.

Claims 20-22 and 24 are analyzed as devices of claims 8-10 and 12 respectively.

Claim 25 is analyzed as an apparatus for the implementation of claim 1.

Wasserman teaches client 130 – which could be a set top box (see [0037]).

Claim 26 is analyzed as an apparatus for the implementation of claim 13.

Claim 27 is analyzed as a device of claim 25.

Claim 28 is analyzed as a system of claim 25.

Claim 29 is analyzed as a system of claim 27.

Claim 30 is analyzed as a device of claim 26.

Claim 31 is analyzed as a system of claim 26.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wasserman in view of Halsall (*"Data Communications, Computer Networks and Open Systems"*, 4th Edition, 1996).

Regarding claim 5, Wasserman teaches the method as claimed in claim 1. However, it fails to teach wherein the search step, carried out in the at least one terminal device of searching, comprises searching for the information in the data stream after an unsuccessful search in the cache memory.

Halsall teaches searching for the information in the data stream after an unsuccessful search in the cache memory (fig. 4.13a; *for in order for S to request a re-transmission of a N frame, it must have searched in it's memory or contents receive list and upon the absence of such frame there, subsequently requests it from the data stream in P*).

Therefore, it would be obvious to one of ordinary skill in the art at the time that the invention was made to modify the teaching of Wasserman with that of Halsall, and make the system search first in the local memory prior to searching in the data stream or carousel, for the purpose of error correction in the delivery of the EPG data.

Claim 17 is analyzed as a device of claim 5.

7. Claims 6-7, 11, 18-19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wasserman in view of Penk.

Regarding claim 6, Wasserman teaches claim 1. However, it does not teach wherein the information is encapsulated in at least one MPEG table identified by a respective table identifier.

Penk teaches wherein the information is encapsulated in at least one MPEG table identified by a respective table identifier (paragraphs 3-5; *for MPEG data streams are transmitted in tables which include identifiers used to identify the streams*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wasserman and Penk – to encapsulate and transmit the EPG information for MPEG streams in tables with certain identifiers - for the purpose of properly searching, locating and identifying the EPG data.

Regarding claim 7, Wasserman in view of Penk teach the method as claimed in claim 6, wherein the search step comprises searching for the MPEG table from its respective table identifier whereas the recovery step comprises the sub-step of recovering the information from the duly identified MPEG table (*the EPG data stream is encapsulated in an MPEG table referenced by a table identifier, as taught by Penk. Upon a search request by the EPG program or viewer, the search engine would search the carousel file system to locate the MPEG table and then delivering the data in the MPEG table to complete the recovery process*).

Regarding claim 11, Wasserman in view of Penk teach the method as claimed in claim 6. Wasserman further teaches storing the information in the cache memory according to a structural organization similar to that of the information in the data stream (see [0041] and [0053]).

Claims 18-19 and 23 are analyzed as devices of claims 6-7 and 11 respectively.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

9. Leoprini et al (US 2003/0110382).

10. Boyle et al (US 7,206,497).

11. Eingard et al (US 2003/0056218).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dika C. Okeke whose telephone number is (571)270-

5367. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. to 7:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on (571)272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dika C. Okeke/
Examiner, Art Unit 2425

/Brian T. Pendleton/

Supervisory Patent Examiner, Art Unit 2425